COMMUNICATION AND NETWORKING RISER ECR FORM

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ECR# (assigned internally): #010

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Title of the Change: **Definition of CNR pullup voltage on CDC_DN_ENAB# pin**

Specification Title and Version: **CNR Specification, Version 1.0**

Reason for Change:
Many parts that may be used to drive/read the Codec_Down_En pin may or may not be 5V tolerant, whereas most devices are 3.3V tolerant. The pullup resistor on the CNR riser card pullup voltage should be speced to a 3.3V pullup to allow for the widest range of compatibility to motherboard components that may connect to this pin.

At the very least, the specific pullup voltage should be specified so that board designers can validate that the device that there are connecting to this pin is voltage tolerant

The way the spec if defined today, there is conflicting data as to which voltage the pull-up resistor is connected too. One picture (Figure 11) in the spec shows it pulled up to VCC. The electrical section 3.4 eludes to the fact that the pull-up voltage can be either 3.3V or 5V, depending on which voltage is primary voltage being used on the CNR card.

Description of Change:

Modify the Table 11 to specify the actual minimum and maximum input voltage levels, rather than a percentage of V_{DD}, as is done now.

Signal Name	Min.	Max.	Units	Comments
CDC_DN_ENAB#				
Pull-up resistance	950	1050	ohms	Value of resistance on CNR
Pull-down resistance	9500	10500	ohms	Value of resistance on Motherboard
V_{IL}	-0.5	0.9	Volts	~~***V_{DD} refers to the digital supply operating the circuitry on the CNR board, which interfaces to the specified signal (i.e. 3.3VD).***~~
V_{IH}	1.65	3.6	Volts	

Also modify Figures 11 through 13 to indicate that R_B is pulled up to a "+V" power supply.